## United States Patent [19] Patent Number: 4,614,454 [11] Sep. 30, 1986 Kassai Date of Patent: [45] BABY CARRIAGE GRIP ROD LOCKING 2,632,440 3/1953 Hauser et al. ...... 403/62 X 2,683,321 7/1954 Faber ...... 403/62 X **MECHANISM** 4,191,397 3/1980 Kassai ...... 280/650 X [75] Inventor: Kenzou Kassai, Osaka, Japan FOREIGN PATENT DOCUMENTS [73] Assignee: Aprica Kassai Kabushikikaisha, 4013 of 1901 United Kingdom ...... 403/62 Osaka, Japan 26961 of 1904 United Kingdom ...... 403/62 [21] Appl. No.: 688,619 Primary Examiner—Cornelius J. Husar [22] Filed: Jan. 3, 1985 Assistant Examiner-Todd G. Williams Attorney, Agent, or Firm-W. G. Fasse; D. H. Kane, Jr. [30] Foreign Application Priority Data **ABSTRACT** Jan. 11, 1984 [JP] Japan ...... 59-4101 A locking mechanism for locking two foldable sections [51] Int. Cl.<sup>4</sup> ..... F16C 11/00 (2a, 2b) of a grip rod (2) of a baby carriage has two gears (26) meshing with each other. The grip rod sections are 403/100; 403/102; 403/325; 16/354; 16/324; foldably interconnected by a coupling (12) which sup-280/644; 297/363 ports the gears (26) for rotation around their respective [58] Field of Search ...... 403/62, 84, 92, 93, axes. One end surface of each gear (26) is formed with 403/96, 100, 101, 102, 325; 16/354, 324; a locking recess (29) for receiving a locking plate (20) in 280/644, 642, 650, 658; 297/363, 355, 369 the locked state. The locking plate is movable axially of References Cited [56] the gears (26) for unlocking. The locking plate (20) is urged by a spring (32) into the locking recesses (29) to

U.S. PATENT DOCUMENTS

477,109 6/1892 Flocke ...... 16/324

575,266 1/1897 Knoll et al. ...... 403/92 X

635,744 10/1899 Catudal ...... 403/96 X 663,195 12/1900 McGuire ...... 403/93 X 698,137 4/1902 Porter ...... 403/325 X

6 Claims, 22 Drawing Figures

maintain the locked state. A push button (23) moves the

locking plate (20) out of the locking recesses (29)

against the force of the spring (32) to permit the folding.

